

Report for MTurk Pilot (n=216)

2022_08_02_Empathy_Poor_Homelessness

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1 Completion time after cutting videos

We conducted a $n = 15$ pilot on Oct 10, a second $n = 15$ pilot on Oct 12, and a full $n = 201$ study on on October 13-14, 2022.

Cutting the videos reduced the median response time from in first pilot to in the full study and the second pilot.

Table 1: Completion time

Study	Min	Median	Mean	Max
new (cut videos)	8min 59s	16min 8s	17min 25s	61min 58s
old (uncut videos)	3min 49s	17min 18s	19min 32s	40min 14s

2 Attention and manipulation checks

The responses from the first $n = 15$ pilot were discarded because respondents saw a different version of the study, i.e. that with the longer videos. The remaining 216 respondents completed attention and manipulation checks at an acceptable level.

- **Attention:** 216 out of 216 (100%) respondents selected the correct answer.
- **Mobility manipulation:** 211 out of 216 (97.69%) respondents selected the correct answer when asked about the availability of opportunities according to the vignette.
- **Subjective effort based mobility:** Respondents in the low mobility condition perceive mobility to be lower on average (31.9) than those in the high mobility condition (58.9) with $p < 0.01$.
- **Empathy manipulation:** In three survey items, respondents indicated on average more empathy towards the individuals in the homelessness videos when compared to those in the control videos with $p < 0.01$, $p < 0.01$, and $p < 0.01$ respectively.

The following analysis was conducted on 211 out of 216 initial observations.

3 Treatment assignment

Table 2: Assignment of 211 participants to combinations of survey quota and conditions

Party	n	Mobility		Empathy	
		Condition	n	Condition	n
Democrat	73	high	34	control	19
				treatment	15
		low	39	control	16
				treatment	23
Republican	69	high	35	control	12
				treatment	23
		low	34	control	24
				treatment	10
Independent	69	high	36	control	17
				treatment	19
		low	33	control	18
				treatment	15

4 Dependent variables

Variable	Question Text
dv_gen_welfare_1	Welfare programs by the government are necessary to ensure fairness in our society.
dv_gen_welfare_2	The United States federal government is spending too much money on welfare.
dv_welfare_poor_hard_1	We should increase funds for government programs designed to care for poor people.
dv_welfare_poor_hard_2	We should expand government programs that help poor people access the basic resources they need.
dv_welfare_poor_hard_13	We should increase funds for government programs designed to give hard-working people a chance to advance economically.
dv_welfare_poor_hard_14	We should expand government programs that help hard-working people to get ahead in society.
dv_spec_welfare_pol_1	...expand access to food stamps.
dv_spec_welfare_pol_2	...increase federal funding for food banks.
dv_spec_welfare_pol_13	...invest more in the unemployment insurance (UI) system to help people who have lost their jobs.
dv_spec_welfare_pol_14	...improve access to health care for poor people.
dv_mobility_pol_1	...create a “baby bonds” program in which every American child receives a trust fund of \$50,000 for college tuition, buying a home, or starting a business.
dv_mobility_pol_2	...increase financial aid so that more low-income students can attend college.
dv_mobility_pol_3	...increase government-funds for preschool programs.
dv_mobility_pol_10	...make public colleges and universities tuition-free.
dv_ineq_1	In your judgement, how large or small is the difference in income between the rich and the poor in the United States?

5 Results

Note: The figures report the mean in the four groups and the associated standard error of the mean (se).

Abbreviations:

- Ps: Participants
- HM: High mobility (chances of earning more than one’s parents are high)
- LM: Low mobility (changes are low)
- ET: Empathy treatment (exposure to homelessness through videos)
- EC: Empathy control (exposure to neutral videos)

5.1 General welfare preferences

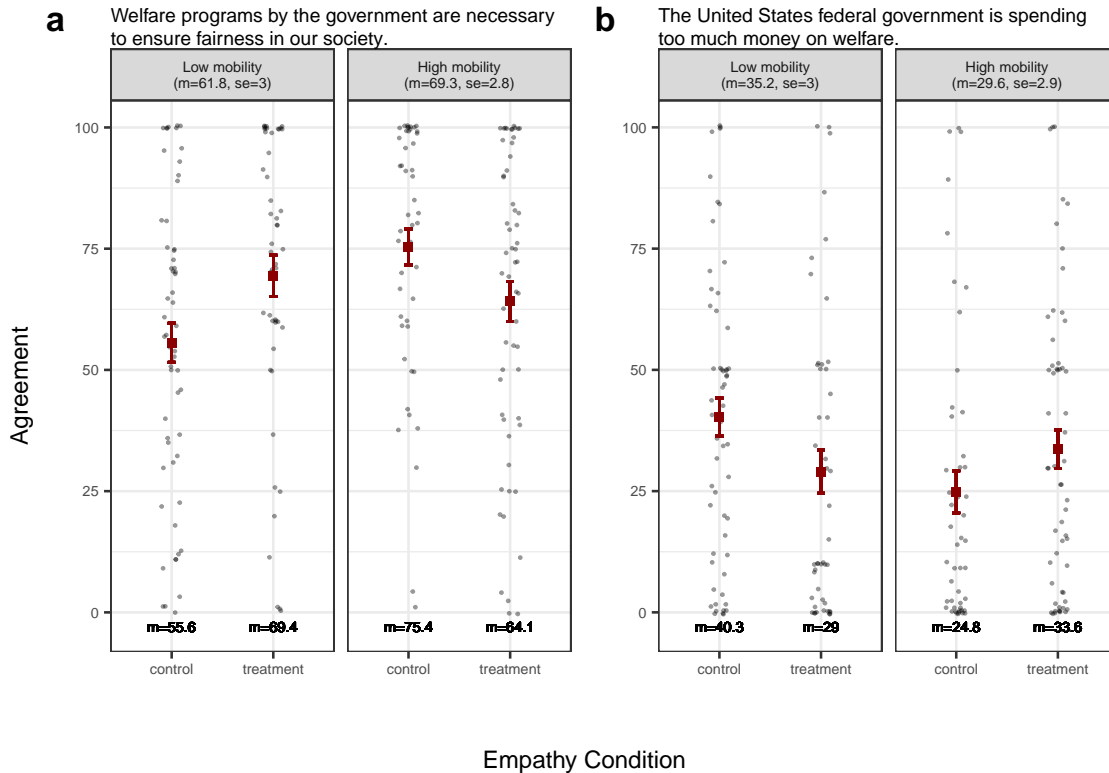


Figure 1: General welfare preferences

Figure 1a

- HM: Ps in the HM condition are *more* likely support welfare programs to ensure fairness.
 - If the US provides good opportunities, Ps may think that (existing) welfare policies are effective in ensuring fairness.
- HM-ET: If they are also exposed to homelessness, they don't endorse welfare programs by the government.
 - Seeing homelessness casts doubt on the effectiveness of welfare programs.
- LM: Ps in the LM condition are *less* likely support welfare programs.
 - If those opportunities are not available, they think that welfare programs are ineffective.
- HM-ET: If they are exposed to homelessness, they are more likely to endorse programs by the government.
 - Seeing homelessness in addition to sparse opportunities leads Ps to belief that the government should at least try welfare programs.

The American does not reduce but increase a more comprehensive welfare by strengthening the belief in the efficacy of government. Ideology ftw!

Figure 1b

- HM: If there are good opportunities, Ps don't think that the government spends too much on welfare.
 - They might attribute good opportunities to welfare spending.
- HM-ET: Yet if Ps are also exposed to homelessness, they are more likely to think that the government spends too much.
 - Despite providing good opportunities, they see that the system leaves groups behind, thus showing the inefficacy of welfare spending.
- LM: If there are few opportunities, Ps think the government spends too much on welfare.
 - They attribute bad opportunities to the inefficacy of welfare spending.
- HM-ET: If Ps are also exposed to homelessness, they are less likely to think that the government spends too much.
 - The U.S. offers few opportunities and it leaves people behind, but the government should do at least something.

5.2 Specific welfare preference

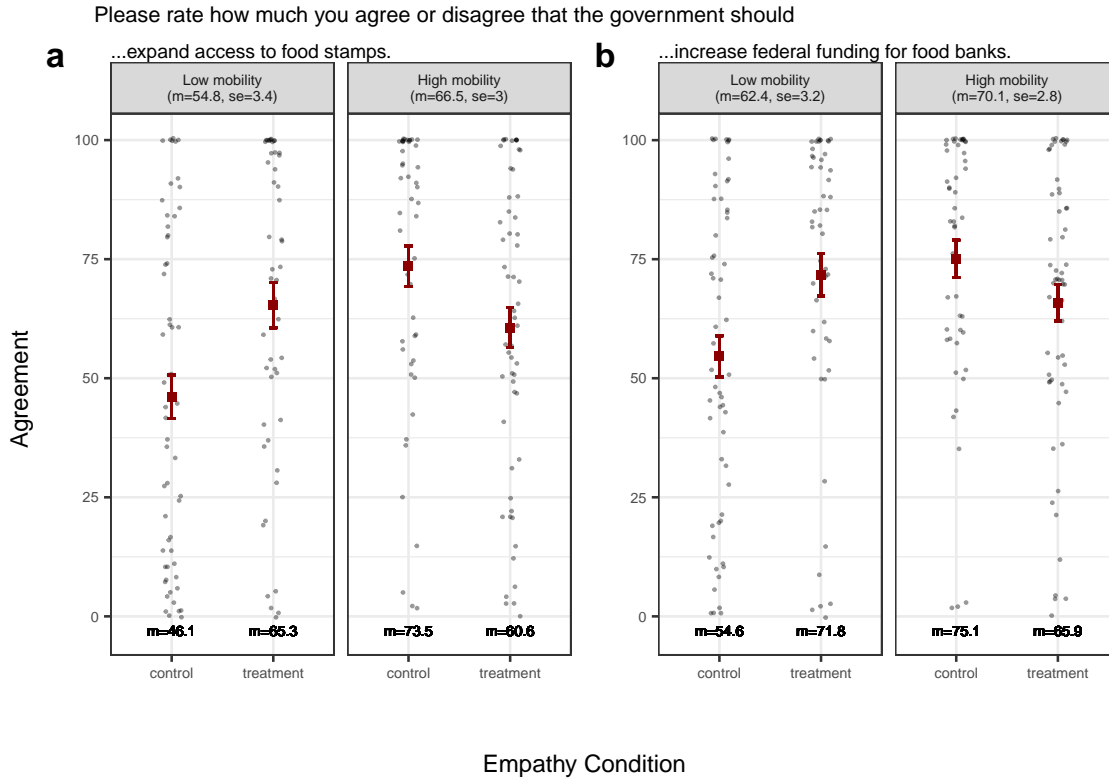


Figure 2: Specific welfare preferences: Food stamps and food banks

Figure 2a

- HM: Ps in the HM condition are *more* likely to endorse expanding access to food stamps.
- HM-ET: If Ps are also exposed to homelessness, they are *less* likely to hold that view.
- LM: Ps in the LM condition are *less* likely to endorse expanding access to food stamps.
- LM-ET: If Ps are also exposed to homelessness, they are *more* likely to hold that view.

Figure 2b

See pattern as for figure 2a.

Please rate how much you agree or disagree that the government should

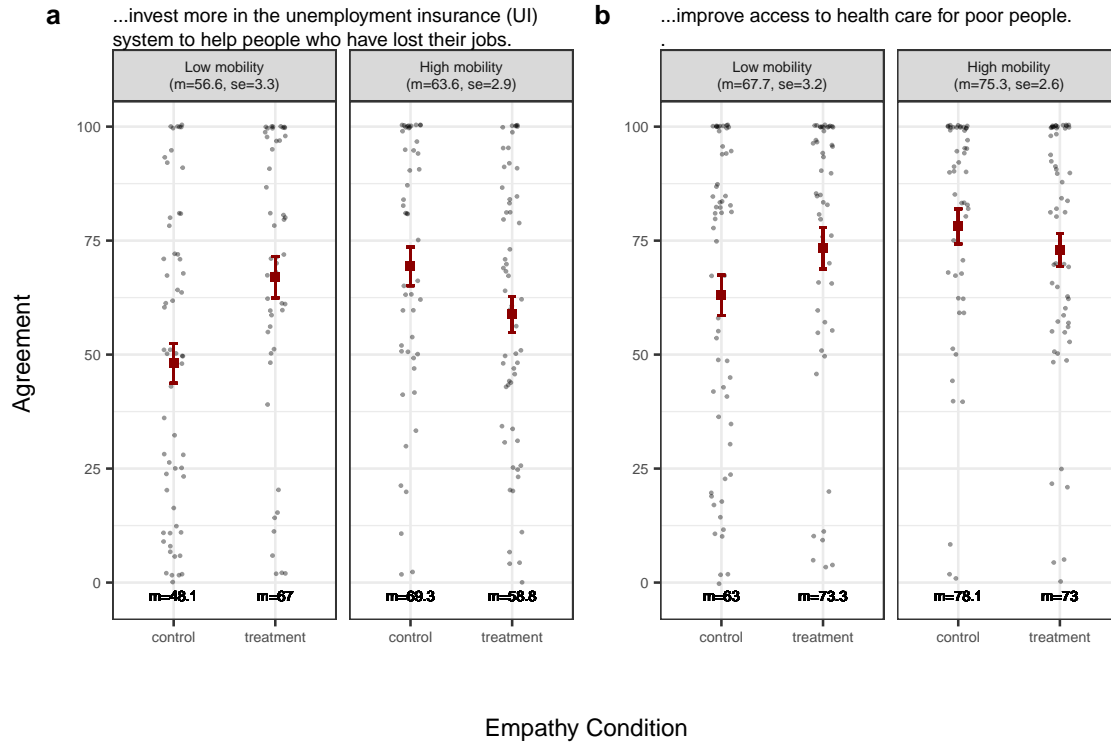
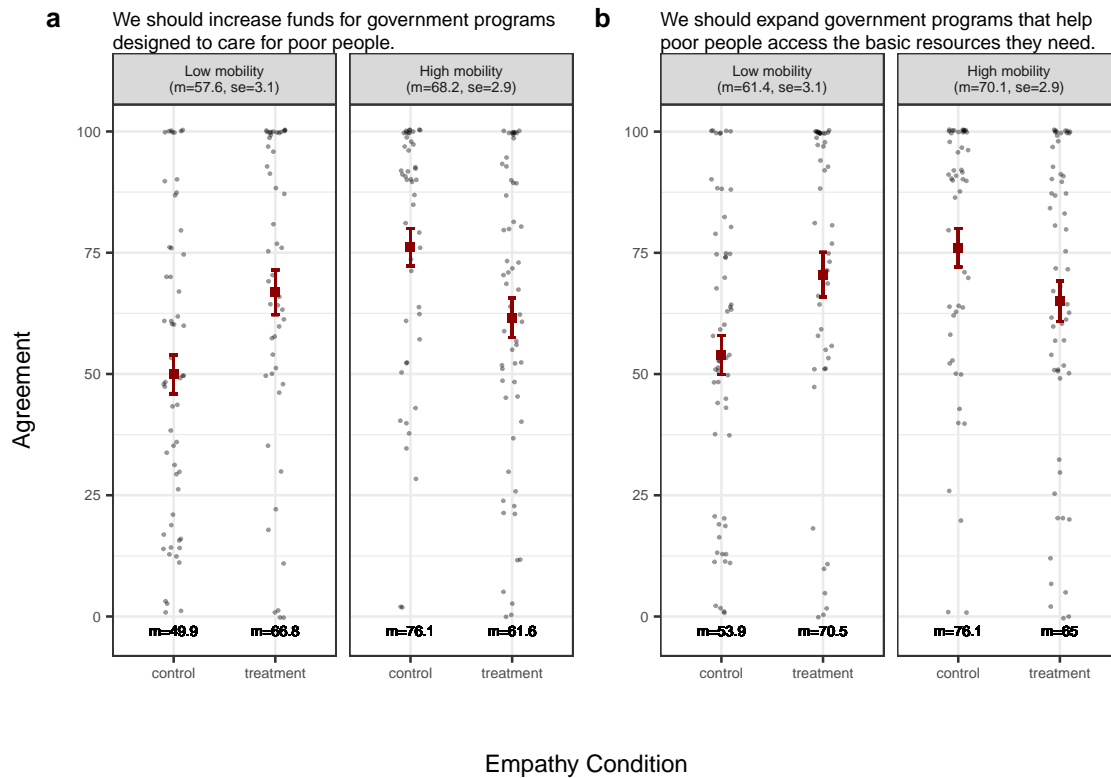
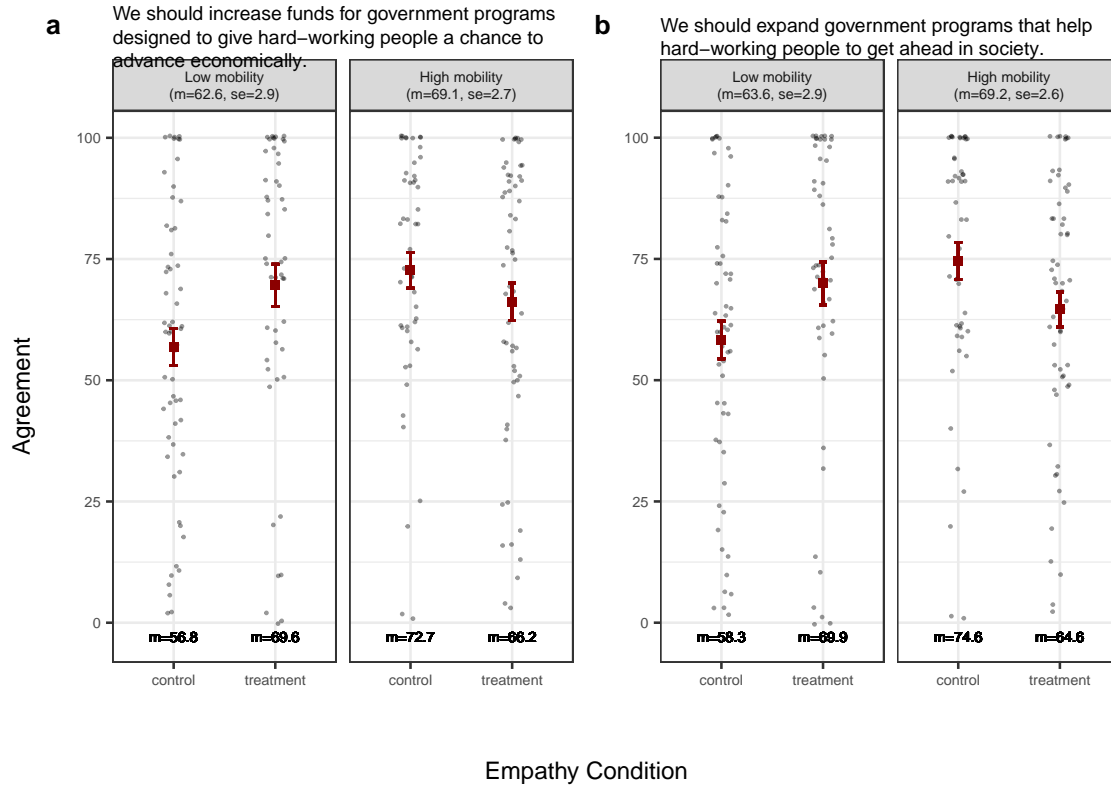


Figure 3: Specific welfare preferences: Unemployment Insurance and health care

5.3 Support for the poor



5.4 Support for hard-working people



5.5 Social mobility policy

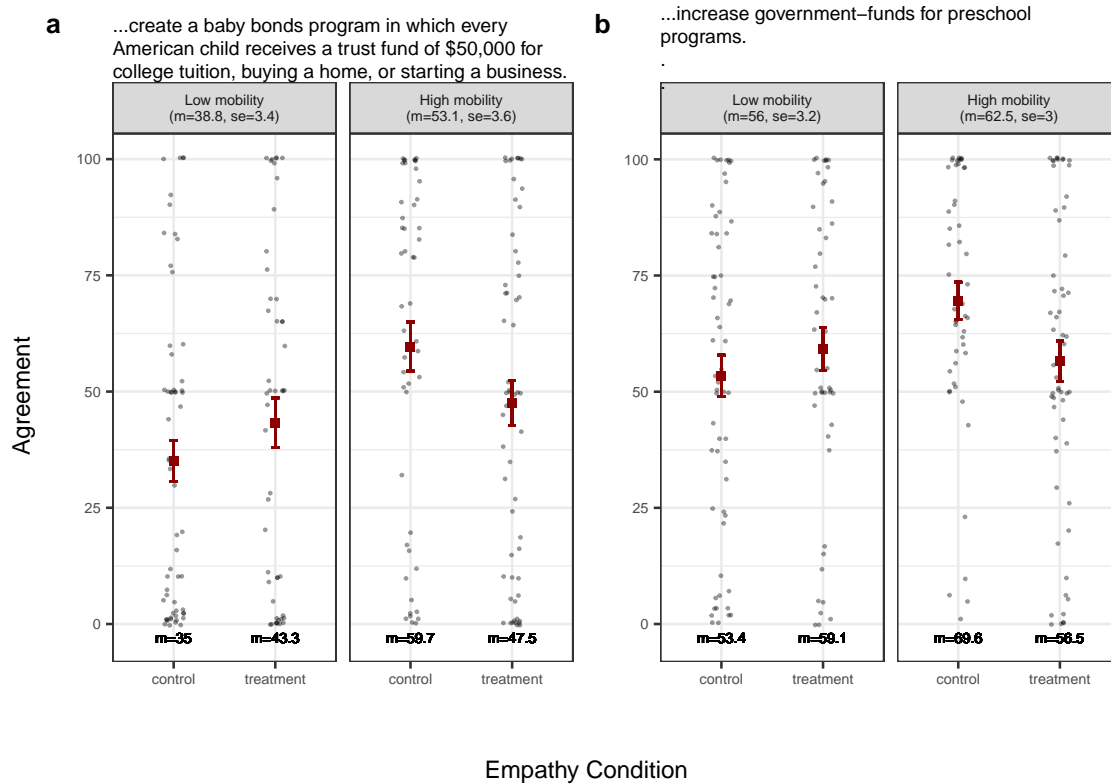


Figure 4: Social mobility policy: Childhood education

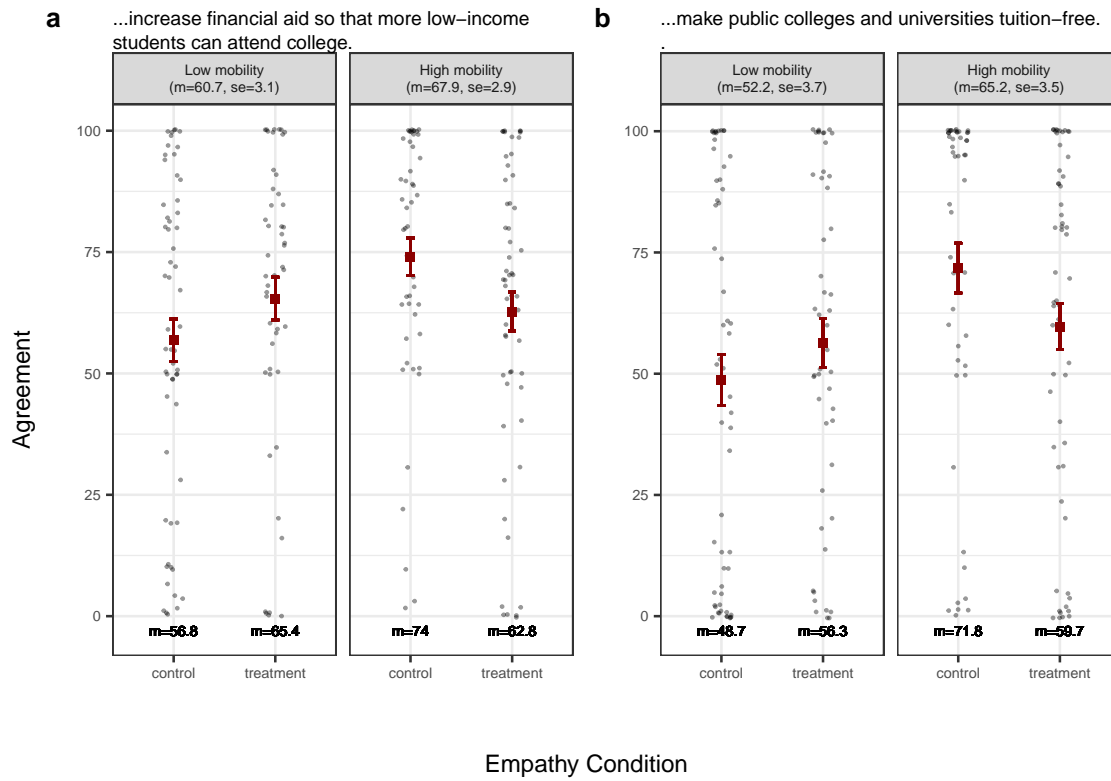
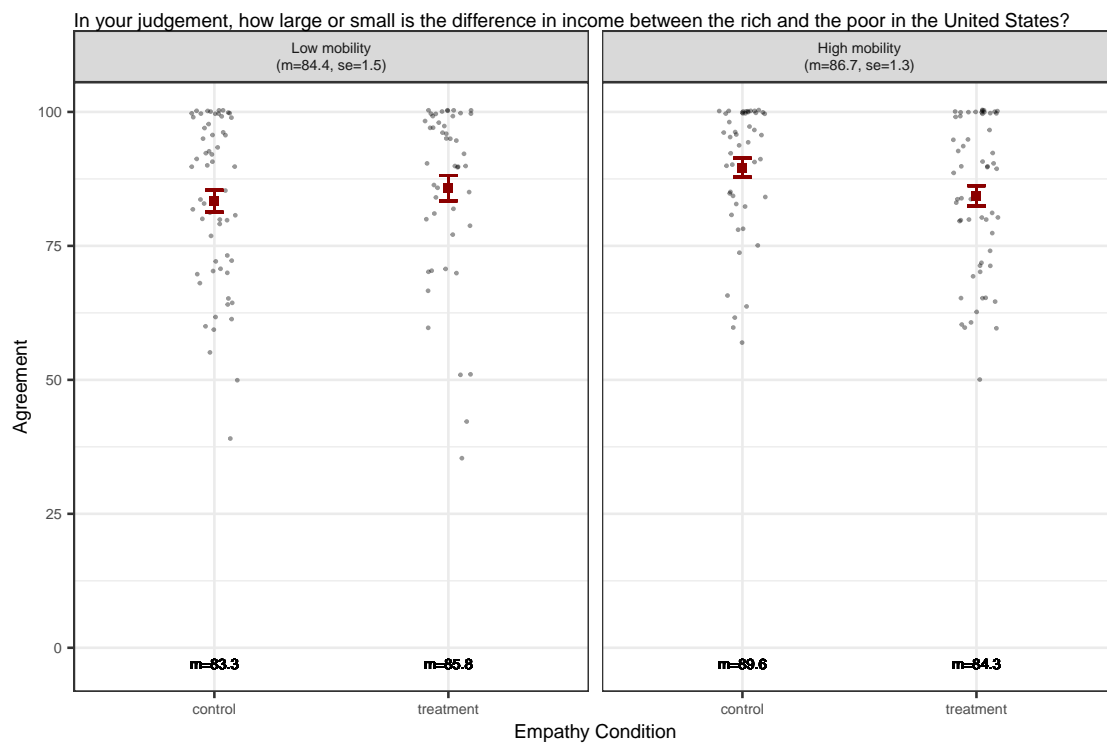


Figure 5: Social mobility policy: College education

5.6 Inequality



5.7 Empathetic concern

There are no significant differences in empathetic concern between Ps in the HM and the LM condition. The p-values associated with the t-statistics for items in figures 6a, 6b, 7a, and 7b are $p \approx 0.78$, $p \approx 0.52$, $p \approx 0.1$, and $p \approx 0.24$ respectively.

The videos on homelessness elicit empathy. 2 of the 8 t-tests to compare empathetic concern within either the high or the low mobility condition of the four items revealed a significant difference at the $\alpha = 0.05$ level.

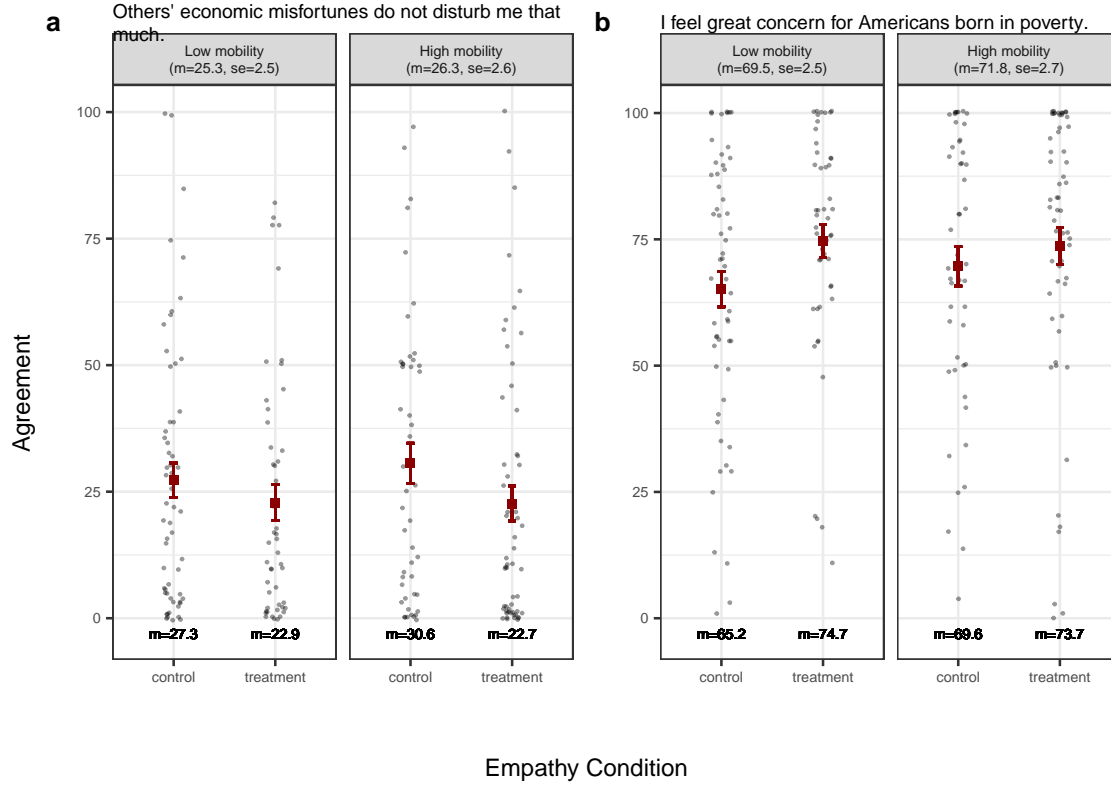


Figure 6: Empathetic concern (1)

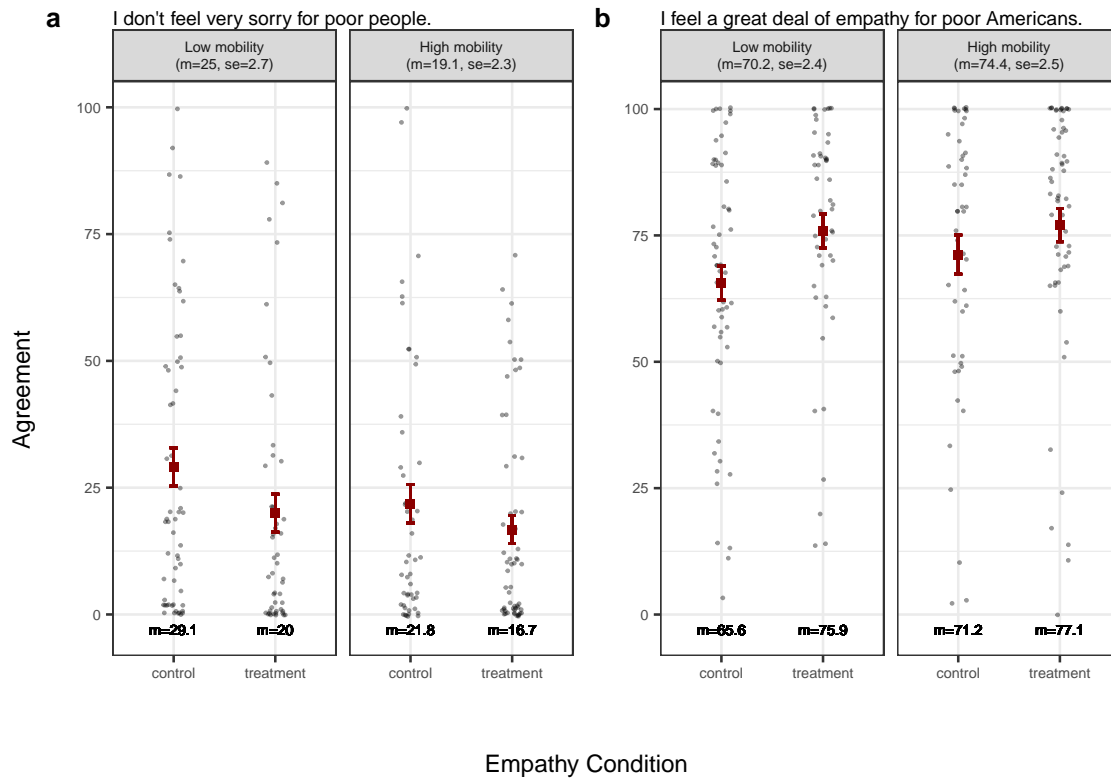


Figure 7: Empathetic concern (2)

5.8 Perspective taking

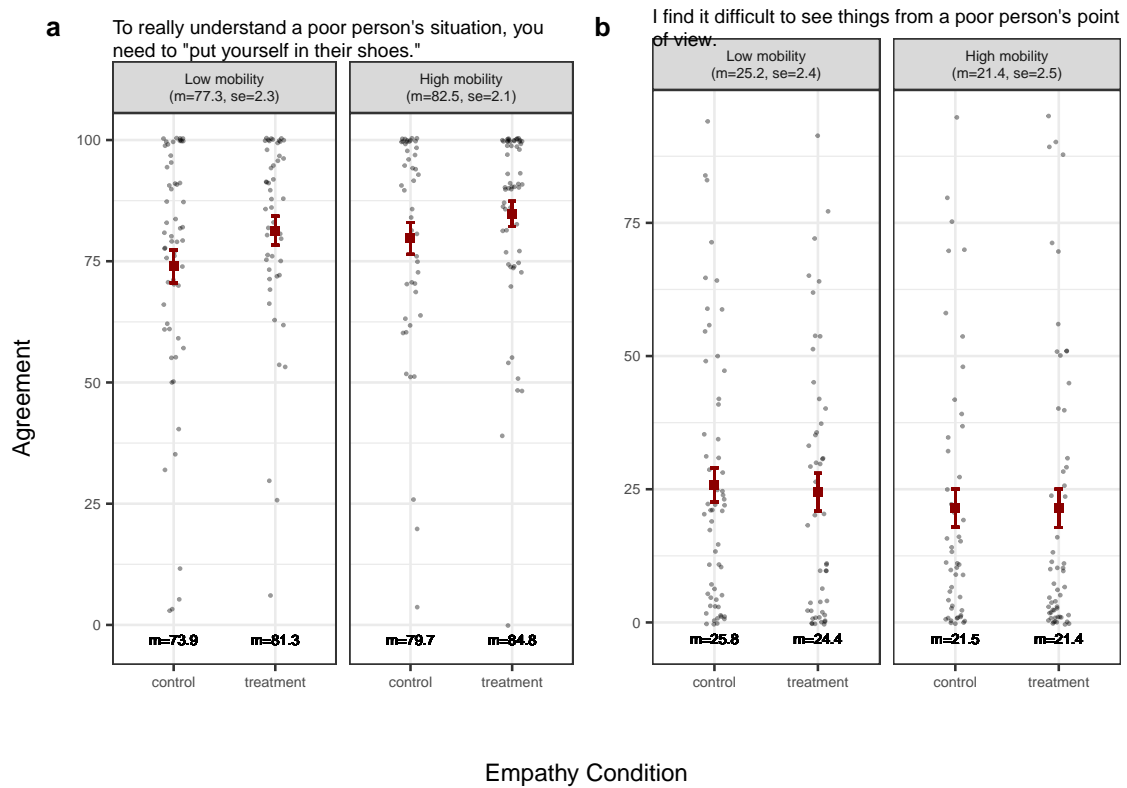


Figure 8: Perspective taking (1)

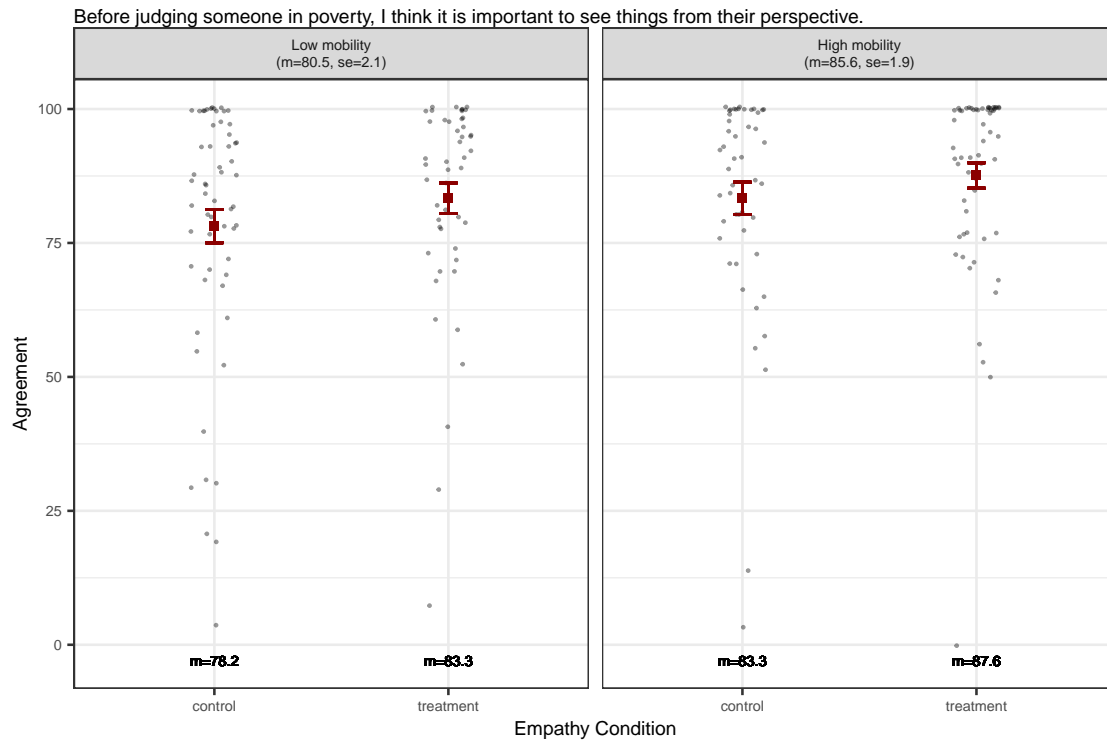
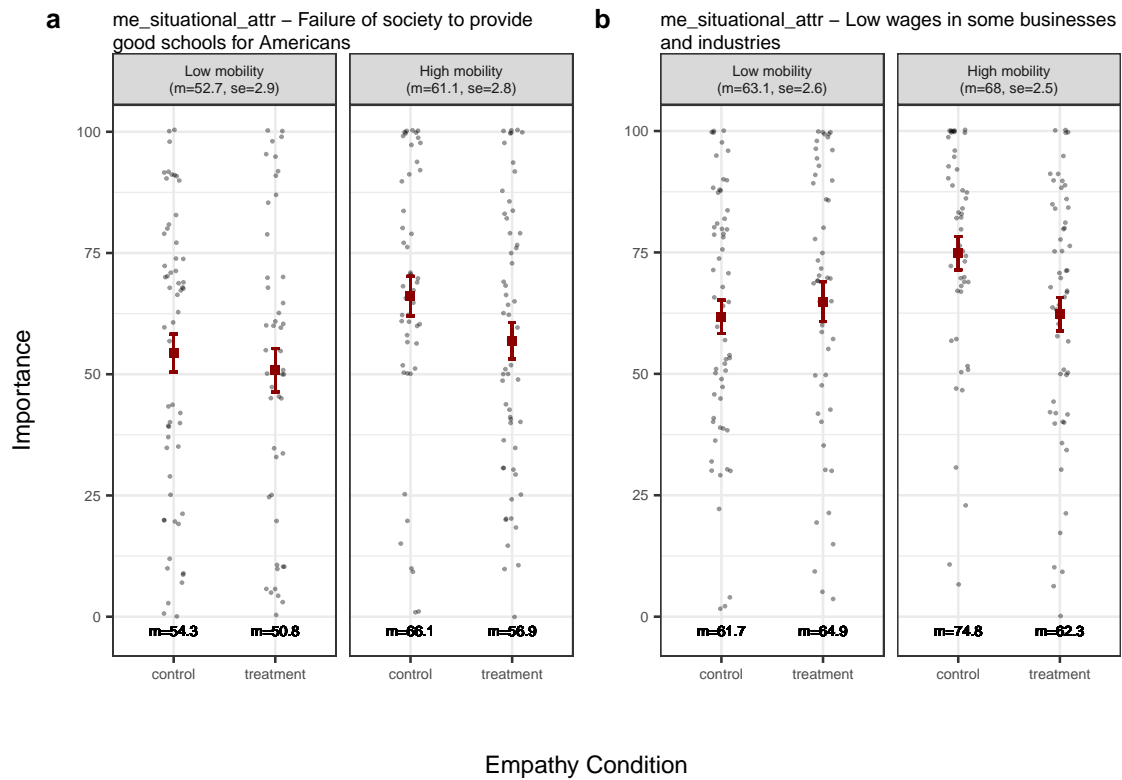
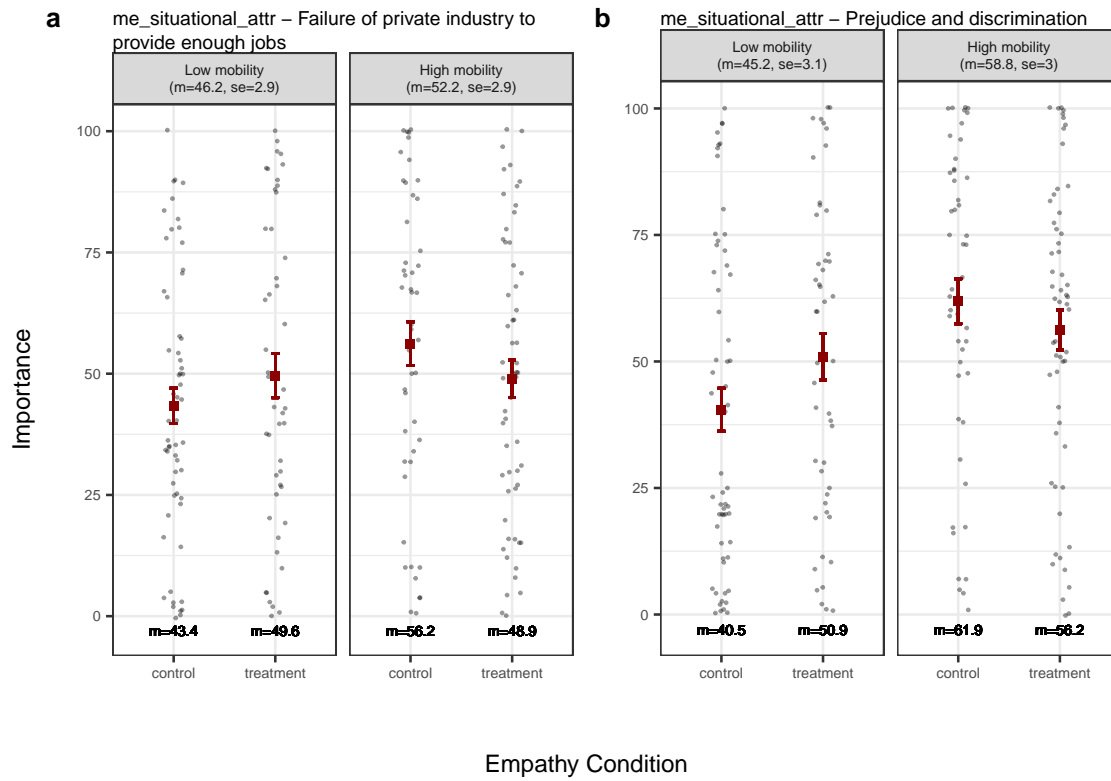


Figure 9: Perspective taking (2)

5.9 Situational attribution of poverty





5.10 Dispositional attribution of poverty

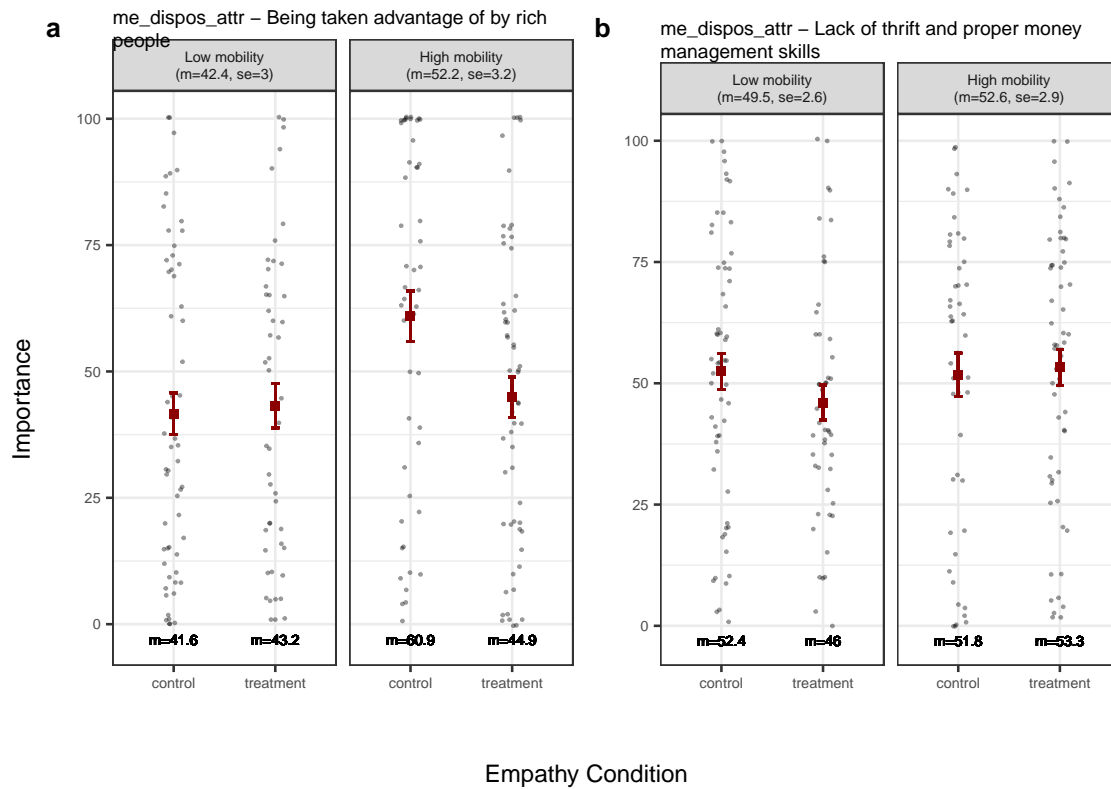


Figure 10: Dispositional attribution (1)

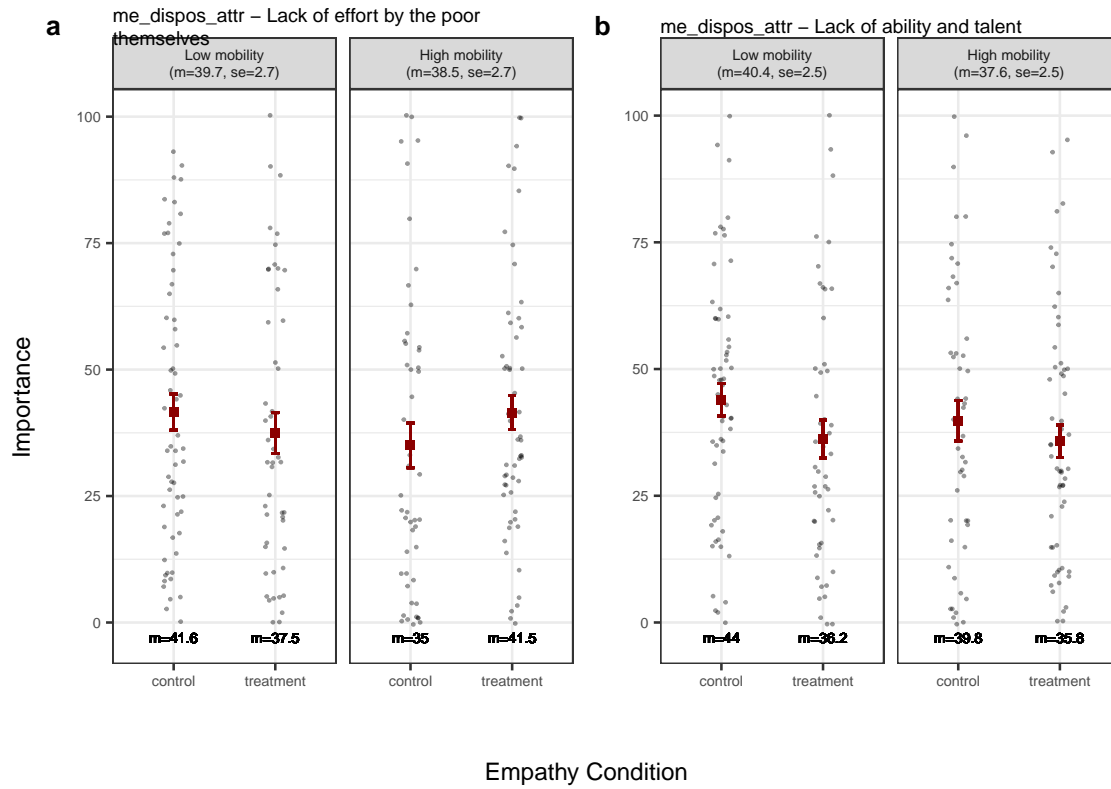


Figure 11: Dispositional attribution (2)

6 Regression analysis

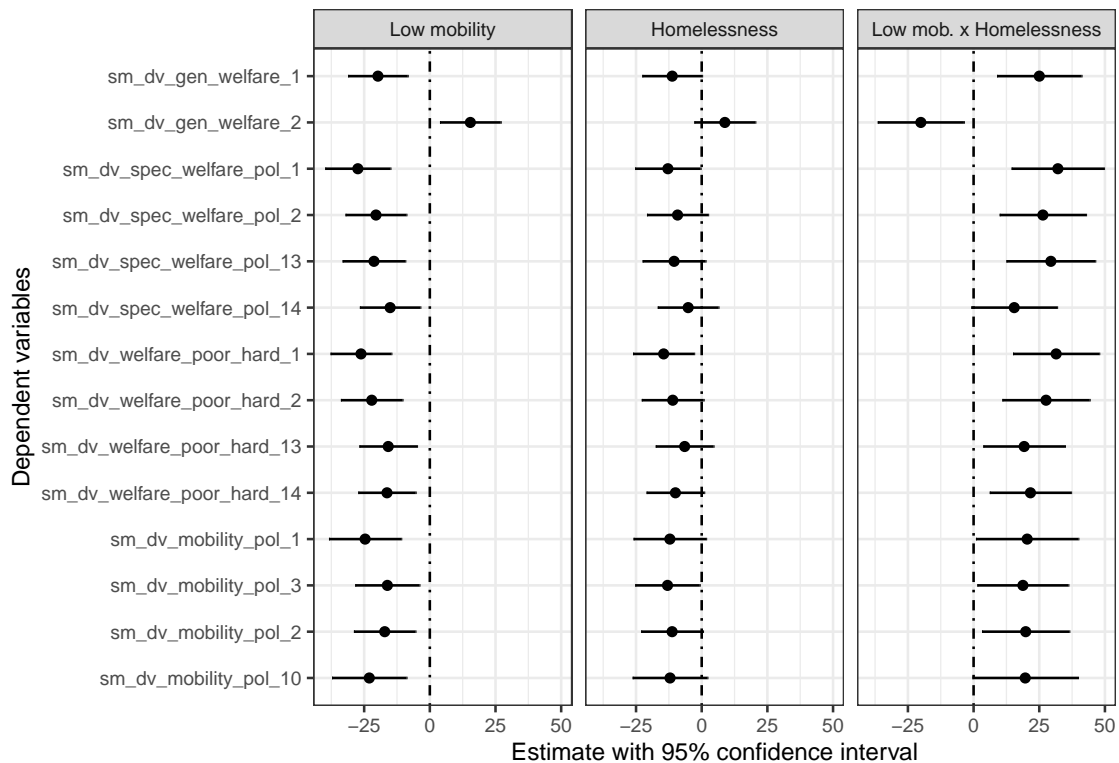


Figure 12: Effect plot for the two conditions and their interaction

7 Moderator

The effect of the empathy condition (exposure to poverty vs control) on support for welfare policy was significantly stronger in the low mobility on the mobility condition $B = 25.024$, $se = 8.155$, $t(207) = 3.068$, $p = 0.002$. In the low mobility condition, participants in the exposure to poverty condition reported significantly higher support for welfare policy than participants in the control condition. ($B = 13.792$, $se = 5.755$, $t(207) = 2.397$, $p = 0.017$). In the high mobility condition, participants in the exposed to poverty condition reported marginally significantly lower support for welfare policy than participants in the control condition ($B = -11.231$, $se = 5.778$, $t(207) = -1.944$, $p = 0.053$).

```
##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition * mobility_condition,
##     data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -74.354 -19.000   4.877  24.646  44.397
##
## Coefficients:
##                                     Estimate Std. Error t value
## (Intercept)                        75.354      4.257  17.700
## empathy_conditiontreatment          -11.231      5.778  -1.944
## mobility_conditionlow              -19.751      5.755  -3.432
## empathy_conditiontreatment:mobility_conditionlow  25.024      8.155   3.068
##                                     Pr(>|t|)
## (Intercept)                        < 2e-16 ***
## empathy_conditiontreatment          0.053275 .
## mobility_conditionlow                0.000724 ***
## empathy_conditiontreatment:mobility_conditionlow 0.002440 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 29.49 on 207 degrees of freedom
## Multiple R-squared:  0.05845,    Adjusted R-squared:  0.0448
## F-statistic: 4.283 on 3 and 207 DF,  p-value: 0.005863

##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition * mobility_condition,
##     data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -74.354 -19.000   4.877  24.646  44.397
##
## Coefficients:
##                                     Estimate Std. Error t value
## (Intercept)                        55.603      3.873  14.357
## empathy_conditiontreatment          13.792      5.755   2.397
## mobility_conditionhigh              19.751      5.755   3.432
## empathy_conditiontreatment:mobility_conditionhigh -25.024      8.155  -3.068
##                                     Pr(>|t|)
## (Intercept)                        < 2e-16 ***
## empathy_conditiontreatment          0.017442 *
## mobility_conditionhigh                0.000724 ***
## empathy_conditiontreatment:mobility_conditionhigh 0.002440 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
##
## Residual standard error: 29.49 on 207 degrees of freedom
## Multiple R-squared:  0.05845,    Adjusted R-squared:  0.0448
## F-statistic: 4.283 on 3 and 207 DF,  p-value: 0.005863

## Number of categories should be increased in order to count frequencies.

## Warning in psych::alpha(.): Some items were negatively correlated with the total scale and probably
## should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option

## Some items ( dv_gen_welfare_2 ) were negatively correlated with the total scale and
## probably should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option

##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition * mobility_condition,
##     data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -74.354 -19.000   4.877  24.646  44.397
##
## Coefficients:
##                                     Estimate Std. Error t value
## (Intercept)                        55.603      3.873   14.357
## empathy_conditiontreatment          13.792      5.755    2.397
## mobility_conditionhigh              19.751      5.755    3.432
## empathy_conditiontreatment:mobility_conditionhigh -25.024      8.155   -3.068
##                                     Pr(>|t|)
## (Intercept)                        < 2e-16 ***
## empathy_conditiontreatment          0.017442 *
## mobility_conditionhigh              0.000724 ***
## empathy_conditiontreatment:mobility_conditionhigh 0.002440 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Residual standard error: 29.49 on 207 degrees of freedom
## Multiple R-squared:  0.05845,    Adjusted R-squared:  0.0448
## F-statistic: 4.283 on 3 and 207 DF,  p-value: 0.005863

##
## Call:
## lm(formula = me_situational_attr_1 ~ empathy_condition * mobility_condition,
##     data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -65.125 -18.579   2.875  23.265  49.187
##
## Coefficients:
##                                     Estimate Std. Error t value
## (Intercept)                        54.345      3.846   14.130
## empathy_conditiontreatment          -3.532      5.716   -0.618
## mobility_conditionhigh              11.780      5.716    2.061
## empathy_conditiontreatment:mobility_conditionhigh -5.663      8.099   -0.699
```



```

##                                     Pr(>|t|)
## (Intercept)                        <2e-16 ***
## empathy_conditiontreatment        0.5372
## mobility_conditionhigh             0.0405 *
## empathy_conditiontreatment:mobility_conditionhigh 0.4852
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 29.29 on 207 degrees of freedom
## Multiple R-squared:  0.03395,    Adjusted R-squared:  0.01995
## F-statistic: 2.425 on 3 and 207 DF,  p-value: 0.06674

##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition * mobility_condition +
##     me_situational_attr_1, data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -80.141 -15.085   2.876  19.847  47.752
##
## Coefficients:
##                                     Estimate Std. Error t value
## (Intercept)                       35.3923     5.0566   6.999
## empathy_conditiontreatment         15.1061     5.3662   2.815
## mobility_conditionhigh             15.3696     5.4160   2.838
## me_situational_attr_1               0.3719     0.0652   5.704
## empathy_conditiontreatment:mobility_conditionhigh -22.9177     7.6060  -3.013
##                                     Pr(>|t|)
## (Intercept)                       3.56e-11 ***
## empathy_conditiontreatment         0.00535 **
## mobility_conditionhigh             0.00500 **
## me_situational_attr_1              4.02e-08 ***
## empathy_conditiontreatment:mobility_conditionhigh 0.00291 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 27.48 on 206 degrees of freedom
## Multiple R-squared:  0.1869, Adjusted R-squared:  0.1711
## F-statistic: 11.84 on 4 and 206 DF,  p-value: 1.127e-08

##
## ORDINARY NONPARAMETRIC BOOTSTRAP
##
##
## Call:
## boot::boot(data = df, statistic = .bootstrapping, R = 5000)
##
##
## Bootstrap Statistics :
##      original      bias    std. error
## t1* -2.106042 -0.06267166   3.17116

## BOOTSTRAP CONFIDENCE INTERVAL CALCULATIONS
## Based on 5000 bootstrap replicates
##
## CALL :
## boot::boot.ci(boot.out = bootstrap.summary, conf = 0.95, type = "bca",

```

```
##      index = 1)
##
## Intervals :
## Level      BCa
## 95%      (-8.827,  3.725 )
## Calculations and Intervals on Original Scale
```

8 Mediation

```
##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition, data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -66.533 -17.533   5.467  27.960  35.453
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      64.547      2.937  21.980  <2e-16 ***
## empathy_conditiontreatment    1.986      4.163   0.477    0.634
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 30.23 on 209 degrees of freedom
## Multiple R-squared:  0.001088,    Adjusted R-squared:  -0.003691
## F-statistic: 0.2276 on 1 and 209 DF,  p-value: 0.6338

##
## Call:
## lm(formula = empa_conc_1 ~ empathy_condition, data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -28.764 -21.752  -7.764  19.242  77.248
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      28.764      2.534  11.351  <2e-16 ***
## empathy_conditiontreatment   -6.012      3.592  -1.674   0.0957 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 26.09 on 209 degrees of freedom
## Multiple R-squared:  0.01322,    Adjusted R-squared:  0.008502
## F-statistic: 2.801 on 1 and 209 DF,  p-value: 0.09572

##
## Call:
## lm(formula = dv_gen_welfare_1 ~ empathy_condition + empa_conc_1,
##      data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -79.568 -20.008   3.251  21.408  72.652
##
```

```
## Coefficients:
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      79.56777    3.34102  23.815 < 2e-16 ***
## empathy_conditiontreatment -1.15317    3.75002  -0.308    0.759
## empa_conc_1       -0.52220    0.07173  -7.280 6.74e-12 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 27.06 on 208 degrees of freedom
## Multiple R-squared:  0.2039, Adjusted R-squared:  0.1963
## F-statistic: 26.64 on 2 and 208 DF,  p-value: 4.998e-11
```